# Evaluation of Rhode Island Department of Health's Emergency Preparedness Campaign 2004

Final Report

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#### NAME OF PROJECT

Evaluation of Rhode Island Department of Health's Emergency Preparedness Campaign 2004

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#### **EXECUTIVE SUMMARY**

The booklet, "Make a Kit. Make a Plan. Stay Informed. Public Health Emergencies: What you can do to prepare", outlining the importance of having both an emergency kit and emergency plan was distributed via U.S. mail to all households in Rhode Island. The booklet discusses the importance of having both an emergency kit and plan, and contains information on what materials and/or information is needed to create a kit and plan. The booklet also contains information on what the state of Rhode Island is doing to prepare to respond to major emergencies, and provides specific information on biological, chemical and radiological emergencies. This report discusses respondents' awareness and existence of emergency kits and plans, their awareness of biological, chemical, or radiological emergencies, and their knowledge about state and federal efforts to respond to such emergencies. In addition, changes in awareness and knowledge between pre and post surveys are discussed.

An initial survey (Cohort I) was conducted to learn if Rhode Islanders are aware of emergency kits and emergency plans, if they have created household emergency kits and plans, and if they are knowledgeable about state and federal emergency plans in case of a biological, chemical, or radiological terrorist attack. A second survey (Cohort II) was conducted after the booklet was distributed. This assessment allowed for the effect of the booklet to be examined. Analyses were conducted to determine if there were significant increases in awareness of emergency kits and plans and/or the existence of created emergency kits and plans after the mailings.

In both Cohorts I and II, the majority of respondents were white (86.8%) and had a high school education or more (65.6%). Approximately half (52.3%) of respondents reported having one to 2 people living in their households and 60.9% stated that they had no children under the age of 18 living with them.

Although 46.7% of participants in both Cohorts reported that they had not heard about an emergency kit within the previous six months, there was a significant increase in the percentage of participants who were aware of emergency kits following the mailing (48.2% versus 58.4%, respectively). In addition, there was a significant increase in the percentage of respondents who reported that they had created or partially created an emergency kit (56.2% versus 68.4%, respectively). It is worth noting that after the mailing, the percentage reporting that they had not created a emergency kit as they "did not know what goes in one" dropped from 9.4% to 2.0%.

After the mailing there was a significant increase in the percentage of respondents who reported being aware of household emergency plans (19.9% versus 31.2%, respectively). In total, 23.8% of respondents had developed an emergency plan and there was no significant difference between the two cohorts. Of those respondents who had not created an emergency plan, 21.7% stated that they had not done so as they "don't know what goes in one".

The majority (75.6%) of participants in both Cohorts felt that they had "a lot", "some", or "a little" of knowledge about biological, chemical, or radiological emergencies. Nonetheless, over 20% of participants stated that they heard "nothing at all" about these emergencies. After the mailing, however, there was a significant shift (Chi-square 17.9, 4 df, p=0.001) between Cohort I and Cohort II in self-reported knowledge of biological, chemical, or radiological emergencies. Compared to Cohort I, a greater percentage of Cohort II respondents stated that they knew "a lot", "some", or "a little" about biological, chemical, or radiological emergencies.

Over 50% of respondents in both Cohorts reported that they knew "nothing at all" about what Rhode Island is doing to respond to possible biological, chemical, or radiological attacks. There was no significant shift between Cohort I and Cohort II in self-reported knowledge about Rhode Island responses to such threats.

The majority of respondents (71.2%) in Cohort II did not remember receiving the booklet. Of those who did recall receiving the booklet, 85.7% reported reading or partially reading it. Slightly less than half (43.0%) of the individuals who read the booklet were motivated to take action.

Prior to the booklet mailing, a majority of survey respondents who reported hearing of or being told to prepare an emergency kit (55.5%), answered "No" when asked if they heard this from a state or local government source. After the booklet mailing, a majority of respondents (53.8%), answered "Yes" when asked if they heard about preparing an emergency kit from a state or local government source, although this change was not statistically significant (Chi-square 2.2, 1 df, p=0.135). Furthermore, among those who recalled receiving and reading the booklet, the shift in respondents who answered "Yes" when asked if they heard about preparing an emergency kit from a state or local government source was even more pronounced: 44.5% answered "Yes" prior to the booklet mailing versus 82.0% after the mailing (Chi-square 20.0, 1 df, p <0.0001).

Between Cohort I and Cohort II, there was a significant increase in the percentage of respondents who reported being aware of emergency kits and emergency plans. This increase would suggest that the booklet may have contributed to an increased awareness. However, only 38% of respondents in Cohort II remembered receiving the booklet. Almost half of the respondents who read the booklet reported taking action afterward.

Findings from the surveys would indicate that there is a need to continue to increase awareness of Rhode Island's efforts to address possible biological, chemical, or radiological attacks. In the future, the Department of Health may want to adopt a multi-pronged approach to increase awareness of emergency kits and emergency plans. Using multiple channels (e.g. printed booklets, radio and print advertisements) may contribute to increased awareness, which, in turn, may result in the creation of additional emergency plans and kits.

#### **INTRODUCTION**

A 29 page booklet, "Make a Kit. Make a Plan. Stay Informed. Public Health Emergencies: What you can do to prepare", was distributed via U.S. mail to all households in Rhode Island.

The booklet's cover is royal blue with "Make a Kit. Make a Plan. Stay Informed. Public Health Emergencies: What you can do to prepare", written in large orange font. The booklet is illustrated, printed on glossy paper and includes information about what the Rhode Island Department of Public Health and its partners are doing to prepare in the event of a biological, chemical, or radiological attack. The booklet provides information on preparing an emergency kit and an emergency plan. An emergency kit contains supplies that would be used in an emergency such as a flashlight, batteries, battery-operated radio, food and water. An emergency plan is a written plan about how to handle an emergency, and includes information on how to get in touch with family members in an event of an emergency and where to meet family members if people become separated. Information on coping with biological, chemical, or radiological emergencies is provided and a family emergency planning card also is included in the booklet.

This report discusses the results of an initial survey (see Appendix A) about respondents knowledge of emergency kits and emergency plans, existence of household kits and plans, and knowledge of federal and state emergency plans in case of a biological, chemical, or radiological terrorist attack. A second survey, which included all questions from the initial survey and 12 additional questions (see Appendix B) about the booklet, "Make a Kit. Make a Plan. Stay Informed. Public Health Emergencies: What you can do to prepare", was administered after the mailing. The two surveys were administered to:

- **1.)** Understand how prepared Rhode Islanders are in case of a major emergency that might affect their health;
- 2.) Evaluate the impact of the booklet, "Make a Kit. Make a Plan. Stay Informed. Public Health Emergencies: What you can do to prepare".

#### <u>METHODS</u>

Both pre and post surveys followed similar protocol. Surveys were administered via telephone by trained interviewers from the Survey Research Center at the University of Rhode Island (URI). All interviews took place in English. A different sample of households was selected for the initial and follow-up surveys.

The initial wave of surveys (Cohort I) occurred in late August and early September, 2004. The booklet, "Make a Kit. Make a Plan. Stay Informed. Public

Health Emergencies: What you can do to prepare", was mailed in mid-September to every household in the state. Following the mailing of the booklet, a second wave of surveys (Cohort II) was administered in November, 2004. This follow-up survey included all questions from the first survey and 12 additional questions that pertained to the booklet.

Only individuals who had household telephones were able to participate as the survey was conducted via telephone. A list-assisted random digit dialing protocol was employed for this project. Survey Sampling Inc of Westport, Connecticut provided a list of Rhode Island telephone numbers that were randomly selected. When interviewers contacted the household, they secured interviews with the head of household whose birthday was closest to the day of the interview. To be eligible to participate, one had to be the head of his/her household and be over 21 years of age. In addition, participants needed to be able to speak English. Before beginning the survey, the interviewer explained that participation was voluntary and that their responses would remain confidential. During the interview, the interviewer used a scripted survey (See Appendices A and B) and all information was entered using an individualized computer-assisted telephone interview (CATI) system with special features to facilitate implementation and ensure participants' confidentiality.

The interviewer response rate (the number of completed surveys divided by the number completed surveys plus gatekeeper refusals and refusals) was 70.5% for Cohort I and 75.3% for Cohort II. The completion rate (the number of completed survey divided by the total number of potential respondents) was 63.4% for Cohort I and 64.6% for the Cohort II.

#### **ANALYSES**

Frequencies were used to describe participants by demographic characteristics and to determine frequency of response rates for all questions. Due to the small number of "don't know/not sure", and "refusals", these responses were set to missing to faciliate some analyses. All analyses were conducted using SAS® 8.2 and statistical tests were considered significant at p < 0.05. Due to rounding and missing values, the percent totals shown in the tables may not always equal 100%.

Chi square analyses were conducted to determine if the pre (Cohort I) and post (Cohort II) samples differed by demographic and household characteristics. Chi square statistics also were run to determine if there were significant differences in responses between Cohort I and Cohort II.

#### **DETAILED RESULTS**

#### **Participants:**

The majority of respondents were white (86.8%) and had a high school education or more (65.6%). Approximately half (52.3%) reported having one to 2 people living in their household and 60.9% stated that they had no children under the age of 18 living with them. There was no difference between the two cohorts by any of the demographic characteristics, except gender (Chi-square 6.33, 1 df, p=0.012). A smaller percentage of respondents in Cohort I were men compared to Cohort II (33.0% versus 44.4%, respectively).

Table 1: Demographic characteristics of respondents.

	Cohort 1 Respondents	Cohort 2 Respondents	Total
Base:	N=251	N=250	N=501
	%	%	%
Gender			
Male	33.0	44.4	38.7
Female	66.9	55.6	61.3
Race/Ethnicity			
White	86.5	87.2	86.8
Black/African American	3.2	4.0	3.6
Hispanic/Latino	4.4	6.4	5.4
Other	8.8	8.4	17.2
Age groups			
21 to 34	16.3	16.0	16.2
35 to 49	35.9	34.4	35.1
50 to 64	25.9	28.0	27.0
Over 64	21.5	21.2	21.4
Education level completed			
8th grade or less	3.2	2.0	2.6
Some high school	32.7	30.9	31.8
High school graduate or more	64.1	67.1	65.6
Number of people in household			
1 to 2	50.2	54.4	52.3
3 to 4	33.5	34.0	33.7
5 to 6	13.9	8.8	11.4
0ver 6	2.0	2.0	2.0
Number of children < 18 in household			
0	58.6	63.2	60.9
1-2	34.7	19.2	31.9
3-4	6.0	6.4	6.2
5-6	0.8	0.80	0.8

#### **Emergency kit:**

#### Awareness of emergency kits

After the mailing of the booklet, there was a significant increase (Chi-square 5.2, 1 df, p=0.022) in the percentage of respondents who reported hearing of or being told to create an emergency kit during the previous six months (48.2% versus 58.4%, respectively).

Forty-seven percent of respondents living in Providence County in Cohort I versus 59.3% in Cohort II had heard of or been told to create an emergency kit. This was a significant increase (Chi-square 4.0, 1 df, p=0.044); however, in Bristol, Kent, Newport, and Washington Counties there was no significant difference.

<u>Table 2: Number of people reporting having heard of or being told to prepare a</u> household emergency kit.

	Cohort 1 Respondents	Cohort 2 Respondents	Total
Base:	N=251	N=250	N=501
	%	%	%
Yes	48.2	58.4	53.3
No	51.8	41.6	46.7

#### Source of emergency kit information

Prior to the booklet mailing, a majority of survey respondents who reported hearing to prepare an emergency kit (55.5%), answered "No" when asked if they heard this from a state or local government source. Similarly, a majority of respondents also answered "No" when asked if they heard about preparing an emergency kit from a federal government source, family member or friend, or from some "other" group (59.3%, 66.1% and 71.4 %, respectively).

After the booklet mailing, a majority of respondents (53.8%), answered "Yes" when asked if they heard about preparing an emergency kit from a state or local government source, although this change was not statistically significant (Chi-square 2.2, 1 df, p=0.135). A majority shift from "No" to "Yes" responses was not observed with federal government sources, family members or friends, or from "other" groups.

Among those who recalled receiving and reading the booklet (table not shown), the shift in respondents who answered "Yes" when asked if they heard about preparing an emergency kit from a state or local government source was even more pronounced:

44.5% answered "Yes" prior to the booklet mailing versus 82.0% after the mailing (Chisquare 20.0, 1 df, p <0.0001). Similar shifts where not observed with federal government sources, family members or friends, or from "other" groups.

In Providence County, there was a significant difference (Chi-square 4.1, 1 df, p=0.043).between Cohort I and Cohort II in the percentage of respondents who had heard of or been told to create an emergency plan (30.8% versus 56.1%, respectively). There was no other similar significant increase in Bristol, Kent, Newport, or Washington counties.

<u>Table 3: Where respondents reported hearing to prepare an emergency kit for their household.</u>

	Cohort 1 Respondents	Cohort 2 Respondents	Total
Base:	N=121	N=145	N=266
	%	%	%
Only from the Federal government (e.g., Homeland Security)	12.4	6.2	9.0
Only from the State/local government (e.g., Emergency Management, the Health Department, State or local Police or Fire, or other City Leaders like the Mayor)	14.1	18.6	16.5
Only from Family/Friends	8.3	3.5	5.6
Only from some "other" source	15.7	15.9	15.8
Federal and State Governments	8.2	15.2	12.0
Federal Government and Family/Friend	3.3	5.5	4.5
Federal Government and "other" source	1.7	1.4	1.5
State Government and Family/Friend	5.0	4.8	4.9
State Government and "other" source	0.8	1.4	1.1
Family/Friend and "other" source	4.1	4.1	4.1
Federal and State Governments, and Family/Friend	9.9	6.2	7.9
Federal and State Governments, and "other" source	2.5	4.1	3.4
Federal Government, Family/Friend, and "other" source	0.0	0.7	0.4
State Government, Family/Friend, and "other" source	1.7	2.1	1.9
All of these sources	1.7	1.4	1.5
None of these sources	10.7	9.0	9.8

#### Existence of household emergency kit

Overall, slightly more than one-third (37.7%) of respondents stated that they had prepared an emergency kit. This percentage was similar for both cohorts (37.5% versus 38.0%). After the mailing, there was an increase in the number of respondents reporting that they had "partially" created an emergency kit (18.7% versus 30.4%). This difference was statistically significant (Chi-square 12.3, 2 df, p=0.002).

<u>Table 4: Number of people reporting that they have prepared a household emergency kit.</u>

	Cohort 1	Cohort 2	
	Respondents	Respondents	Total
Base:	N=251	N=250	N=501
	%	%	%
Yes	37.5	38.0	37.7
No	43.8	31.2	37.5
Partially	18.7	30.4	24.6
Refused	0.0	0.4	0.2

#### Intention to create an emergency kit

Less than half (46.0%) of all respondents who reported that they had not heard of or been told to create an emergency kit at the time of the survey intended to create one in the future. Although not statistically significant, fewer respondents in Cohort II stated that they planned to create an emergency kit in the future.

<u>Table 5: Number of participants who had not created an emergency kit who</u> intend to prepare one.

	Cohort 1 Respondents	Cohort 2 Respondents	Total
Base:	N=110	N=79	N=189
	%	%	%
Yes	51.8	38.0	46.0
No	46.4	60.8	52.4
Refused	1.82	1.3	1.6

#### Reasons for not creating an emergency kit

Respondents who had not created an emergency kit were asked why they had not prepared one. Response options included: "no time"; "not important"; "don't know what goes in one"; "too expensive"; and "other". The two most commonly cited reasons were that is "not important" and "other". When asked to elaborate on "other", a variety of reasons emerged for not preparing an emergency kit, including haven't gotten around to it, not expecting an emergency, have all those things around the house, and not going to make it through an emergency if one occurs. After the mailing, the percentage reporting that they had not created a plan as they "did not know what goes in one" dropped from 9.4% to 2.0%.

<u>Table 6: Reasons given for not developing an emergency plan from respondents who had not created an emergency kit.</u>

	Cohort 1 Respondents	Cohort 2 Respondents	Total
Base:	N=51	N=48	N=99
	%	%	%
No time	11.3	12.2	11.8
Not important	22.6	24.5	23.5
Don't know what goes in one	9.4	2.0	5.9
Too expensive	5.7	6.1	5.9
Too hard to maintain	3.8	2.0	2.9
Another reason	45.3	53.1	49.0
Refused	1.9	0.0	1.0

#### **Emergency plan:**

Awareness of emergency plan

Overall, the majority (74.5%) of survey respondents had not heard of or been told to create an emergency plan. After the booklet mailing, however, there was a significant (Chi-square 8.4, 2 df, p=0.004) increase in the percentage of participants who reported hearing of or being told to prepare an emergency plan (19.9% versus 31.2%).

<u>Table 7: Number of people reporting having heard of or being told to prepare a household emergency plan.</u>

	Cohort 1 Respondents	Cohort 2 Respondents	Total
Base:	N=251	N=250	N=501
	%	%	%
Yes	19.9	31.2	25.6
No	80.1	68.8	74.5

#### Source of emergency plan information

Prior to the booklet mailing, a majority of survey respondents who reported being told to prepare an emergency plan (56.0%), answered "No" when asked if they heard this from a state or local government source. Similarly, a majority of respondents also answered "No" when asked if they heard about preparing an emergency plan from a federal government source, family member or friend, or from some "other" group (71.4%, 62.0% and 78.0 %, respectively).

After the booklet mailing, a majority of respondents (63.6%), answered "Yes" when asked if they heard about preparing an emergency plan from a state or local government source; this represented a significant response shift (Chi-square 4.7, 1 df, p=0.029). A majority shift from "No" to "Yes" responses was not observed with federal government sources, family members or friends, or from "other" groups.

Among those who recalled receiving and reading the booklet (table not shown), the shift in respondents who answered "Yes" when asked if they heard about preparing an emergency plan from a state or local government source was even more pronounced: 44.0% answered yes prior to the booklet mailing versus 81.8% after the mailing (Chi-square 11.8, 1 df, p<0.001). Similar shifts were not observed with federal government sources, family members or friends, or from "other" groups.

<u>Table 8: Where respondents reported hearing about preparing an emergency plan.</u>

	Cohort 1 Respondents	Cohort 2 Respondents	Total
Base:	N=50	N=78	N=128
	%	%	%
Only from the Federal government (e.g., Homeland Security)	8.0	2.6	4.7
Only from the State/local government (e.g., Emergency Management, the Health Department, State or local Police or Fire, or other City Leaders like the Mayor)	20.0	19.2	19.5
Only from Family/Friends	12.0	3.9	7.0
Only from some "other" source	14.0	11.5	12.5
Federal and State Governments	2.0	11.5	7.8
Federal Government and Family/Friend	2.0	2.6	2.3
Federal Government and "other" source	0.0	0.0	0.0
State Government and Family/Friend	8.0	5.1	6.3
State Government and "other" source	0	2.6	1.6
Family/Friend and "other" source	2.0	2.6	2.4
Federal and State Governments, and Family/Friend	10.0	16.7	14.1
Federal and State Governments, and "other" source	2.0	1.3	1.6
Federal Government, Family/Friend, and "other" source	2.0	1.3	1.6
State Government, Family/Friend, and "other" source	0.0	1.3	0.8
All of these sources	2.0	5.1	3.9
None of these sources	16.0	12.8	14.1

#### Existence of household emergency plan

Approximately one quarter of all respondents reported that they had created an emergency plan. There was, however, no significant difference between Cohort I (23.9%) and Cohort II (23.6%) in the number of participants reporting that they had created a plan.

<u>Table 9: Number of people reporting that they have created a household emergency plan.</u>

	Cohort 1 Respondents	Cohort 2 Respondents	Total
Base:	N=251	N=250	N=501
	%	%	%
Yes	23.9	23.6	23.8
No	68.5	66.4	67.5
Don't have a family	7.2	9.2	8.2
Don't know/not sure	0.0	0.4	0.2
Refused	0.4	0.4	0.4

#### Intention to create an emergency plan

Participants who had not created an emergency plan were queried about their intention to develop one in the future. Approximately one-third of respondents in Cohorts I and II stated that they intended to create an emergency plan in the future. Although there was as increase in the number of respondents who stated that they did not intend to create a kit, the difference was not statistically significant.

<u>Table 10: Number of participants who had not created an emergency kit who intend to prepare one.</u>

	Cohort 1 Respondents	Cohort 2 Respondents	Total
Base:	N=173	N=168	N=341
	%	%	%
Yes	34.7	32.7	33.7
No	21.4	31.0	26.1
Don't know	43.9	36.3	40.2

#### Reasons for not creating an emergency plan

Those survey respondents who stated that they did not have an emergency plan were asked why they had not prepared one. Response options included: "no time"; "not important"; "don't know what goes in one"; "too expensive"; "live alone"; and "other". The three most commonly cited reasons were: "don't know what goes in one", "not important" and "other". When asked to elaborate on "other", a variety of reasons emerged for not preparing an emergency kit, including that the respondent had not

thought about preparing one, that they do not foresee a need for one, and that if there is an attack having an emergency plan would not matter

<u>Table 11: Reasons given for not developing an emergency plan from respondents</u> who had not created an emergency plan

	Cohort 1 Respondents	Cohort 2 Respondents	Total
Base:	N=113	N=113	N=226
	%	%	%
No time	5.3	8.0	6.6
Not important	10.6	17.7	14.2
Don't know what goes in a plan	25.7	17.7	21.7
I live alone	17.7	10.6	14.2
Other reason	37.2	41.6	39.4
Refusal/Don't know/ Not sure	3.6	4.4	4.0

#### Awareness of biological, chemical, or radiological emergencies:

The majority (75.6%) of participants in both Cohorts felt that they had "a lot", "some", or "a little" of knowledge about biological, chemical, or radiological emergencies. Nonetheless, more than 20% of participants stated that they knew "nothing at all" about these emergencies. After the mailing, however, there was a significant shift (Chi-square 17.9, 4 df, p=0.001) between Cohort I and Cohort II in self-reported knowledge of biological, chemical, or radiological emergencies. Compared to Cohort I, a greater percentage of Cohort II respondents stated that they knew "a lot", "some", or "a little" about biological, chemical, or radiological emergencies. Similarly, there was a decrease in the percentage of respondents stating that they know "nothing at all" (27.9% versus 16.4%).

<u>Table 12: Self reported knowledge of biological, chemical, or radiological</u> emergencies.

	Cohort 1 Respondents	Cohort 2 Respondents	Total
Base:	N=251	N=250	N=501
	%	%	%
A lot	8.7	14.0	11.4
Some	23.5	32.8	28.1
A little	36.7	35.6	36.1
Nothing at all	27.9	16.4	22.2
Do not understand question	3.2	0.8	2.0
Refused	0.0	0.4	0.2

Awareness of Rhode Island's efforts to respond to biological, chemical, or radiological attack.

Over 50% of respondents in both Cohorts reported that they knew "nothing at all" about what Rhode Island is doing to respond to possible biological, chemical, or radiological attacks. After the booklet mailing, there was no significant changes in self-reported knowledge about Rhode Island plans to respond to such threats.

<u>Table 13: Self reported knowledge about what Rhode Island is doing to respond to biological, chemical, or radiological attacks.</u>

	Cohort 1	Cohort 2	
	Respondents	Respondents	Total
Base:	N=251	N=250	N=501
	%	%	%
A lot	5.6	4.8	5.2
Some	12.8	14.4	13.6
A little	28.3	29.2	28.7
Nothing at all	53.4	51.2	52.3
Do not understand question/Refused	0.0	0.4	0.2

# The Booklet, "Make a Kit. Make a Plan. Stay Informed. Public Health Emergencies: What you can do to prepare"

Recollection of receiving booklet

Participants in Cohort II were asked a series of questions about the booklet, "Make a Kit. Make a Plan. Stay Informed. Public Health Emergencies: What you can do to prepare", which was mailed to all households in the state of Rhode Island. The majority of respondents (71.2%) did not recall receiving the booklet.

There was a significant difference at the county-level in the percentage of respondents who recalled receiving the booklet with the largest percentage (62.5%) residing in Bristol County followed by Providence County (28.1%), Newport County 26.1%). In Kent and Washington County less than one-quarter of those surveyed recalled receiving the booklet (Chi-square 11.3, 4 df, p=0.024).

Table 14: Percentage of Cohort II respondents who recalled receiving booklet.

	Cohort 2 Respondents
Base:	N=251
	%
Yes	28.0
No	71.2
Refused	0.8

Respondents who had recalled receiving booklet

Most respondents (85.7%) who recalled receiving the booklet reported reading or partially reading it.

Table 15: Percentage of Cohort II respondents who received booklet and read it.

	Cohort 2 Respondents
Base:	N=70
	%
Yes	51.4
No	14.3
Partially	34.3

#### Response to reading booklet

Reading the booklet appeared to motivate individuals to take action as 43% of respondents who read the booklet reported that they took action after reading it. Table 17 displays the reasons individuals who read the book and did not take action (n = 34) gave for not taking action, interestingly, 38.2% stated they did not take action as they already have a kit and a plan.

<u>Table 16: Percentage of Cohort II respondents who took action after reading booklet.</u>

	Cohort 2 Respondents
Base:	N=60
	%
Yes	43.3
No	56.7

Table 17: Reasons for not taking action after reading booklet.

	Cohort 2 Respondents
Base:	N=34
	%
No need	20.6
No time	17.7
Already have a kit and a plan	38.2
Other	23.5

#### Reaction to booklet

More than one-third of participants who read the booklet report that reading it motivated them to take action. After reading the booklet, approximately 20% of respondents reported that they felt reassured or comforted while less than 10% reported feeling scared.

Table 18: How Cohort II respondents felt after reading booklet.

	Cohort 2 Respondents
Base:	N=53
	%
Motivated to take action	35.9
Reassured/comforted	20.8
Scared	7.6
Don't know/not sure	3.8
Refused	1.9

#### Reasons for not reading booklet

Respondents who recalled receiving the booklet, but had not read it (n = 10) were asked why they did not read it. As there was only a small sample size, no one reason stood out above the others. Reasons given for not reading the booklet included; "no time" (20%) and that it was "not a priority" (20%).

Table 19: Reasons for not reading booklet

	Cohort 2 Respondents
Base:	N=10
	%
Did not want to	10.0
Threw it away	10.0
Misplaced it	10.0
No reason	10.0
No time	20.0
Put aside	20.0
Was not a priority	20.0

#### Future intention to read booklet

Respondents who received but had not read the booklet (n = 10) were asked about their future intention to read it. Sixty percent (n = 6) reported that they intended to read it in the future (see Table 20).

The four (40%) participants who stated that they did not intend to read the booklet in the future were asked why they would not read it. As shown in Table 21, three of the 4 individuals stated that the booklet had been thrown away.

<u>Table 20: Future intention to read booklet of Cohort II respondents who received</u> the booklet, but had not read it.

	Cohort 2 Respondents
Base:	N=10
	%
Yes	60.0
No	40.0

Table 21: Reasons for not intending to read booklet.

	Cohort 2 Respondents
Base:	N=4
	%
No time	0.0
Subject not important	0.0
Booklet is lost	0.0
Booklet has been thrown out	75.0
Other	25.0

#### **CONCLUSION**

Many Rhode Islanders have heard of emergency kits with more than half of all respondents recalling having heard of or been told to prepare an emergency kit. Furthermore, more than one-third of the respondents reported that they had already created an emergency kit. Approximately one-quarter of the participants had heard of or been told to create an emergency plan. A similar percentage reported that they had created an emergency plan. Although these findings indicate that many Rhode Islanders are aware of emergency kits and plans, there is need to continue to educating the state's residents about responding to biological, chemical, or radiological attack. Additionally, there is a need to increase awareness of Rhode Island's efforts to address and respond to these types of attacks.

Although more than half of those surveyed were aware of emergency kits, continued efforts are needed to increase awareness of emergency kits, emergency plans, and of Rhode Island's efforts in case of a biological, chemical, or radiological

attack. As a greater percentage of participants were aware of emergency kits than emergency plans, more outreach efforts may want to direct attention toward emergency plans. Of those respondents who had not created an emergency plan, 23.5% stated that they had not created one because it "was not important". This would suggest that future educational efforts stress the importance and benefits of having an emergency plan

One area of concern, however, is the limited number of respondents in Cohort II who recalled receiving the booklet. The good news is that most respondents (85.7%) who recalled receiving the booklet had read or partially read it. Reading the booklet appeared to motivate approximately half of the individuals who read the booklet to take action. It should be noted that over one-third of individuals who read the book, but had not taken action stated that they already have an emergency kit and an emergency plan.

In the future, Rhode Island may want to adopt a multi-pronged approach to increase awareness of emergency kits and emergency plans. Using multiple channels (e.g., booklets, posters, radio and television advertisements) rather than just a booklet may contribute to an increased awareness of the need for emergency kits and plans, and lead to the creation of plans and kits by more Rhode Islanders.

A social marketing campaign may be useful. Such a campaign would stress the benefits of creating an emergency kit and emergency plan while discussing ways to minimize barriers and obstacles to creating emergency kits and plans. Furthermore, audience segmentation would allow different messages to be developed for each particular group (e.g., families with young children, older adults). Targeting messages and determining appropriate channels for delivery will make the message more salient and increase the likelihood of action.

One limitation of this study is that the analyses are based on two separate samples. Thus, the effect of the booklet on knowledge and behavior cannot be accurately assessed. To do this would require that the survey be administered to the same sample twice. The significant differences that were found between Cohorts I and II would suggest that the increase in knowledge may be due, in part, to the booklet. An additional limitation is that 60.9% of respondents did not have children under the age of 18 years of age living in their households. It would be important to know if families with young children have prepared emergency plans and kits.

# Appendix A

#### Rhode Island Department of Health Emergency Preparedness Campaign 2004 Phone survey (pre-post) conducted by the URI Survey Research Center

#### Screening Criteria:

- Person must be a head of household over the age of 21 = record disposition 22 if household members do not fit this criteria.
- Person must speak English = record disposition 23 if this is the case.

#### **Script Introduction:**

- 1. Hello. My name is \_\_\_\_\_\_, I calling on behalf of Rhode Island Department of Health.
- 2. We are conducting a very brief survey to understand how prepared Rhode Islanders are in case of a major emergency that might affect their health. It will only take 2 minutes. To make sure we have a representative group of people, I would like to speak to a head of the household whose birthday is closet to today who is over the age of 21. Would that be you?

If another eligible member of the household comes to the phone as a result of the selection criteria, please introduce yourself again.

- 3. Because this project is important, I would like to complete this survey with you now, over the phone. The survey will only take 2 minutes to complete. Can we start?
- 4. Before we begin, let me make sure I have dialed the right number. Is this \_\_\_\_\_ (verify phone number).

#### **Confidentiality Statement**

All information is strictly confidential and is for survey purposes only. All information collected will be reported as group data. You may refuse to answer any or all questions. Your participation will provide valuable information to this important issue regarding emergency preparedness. The whole survey should take approximately 2 minutes. Do you have questions?

#### **Begin Survey:**

- 1. In the past six months, have you heard or been told to prepare an <u>emergency kit</u> for your household with items such as a flashlight, first aid supplies, food and water, and batteries?
  - 1. Yes
  - 2. No
    - -8 Don't know/not sure
    - -9 Refused

**QbyQ:** Emphasize the word *emergency kit*. Do not read responses

Skip Pattern: If Q1 = 2, -8, -9, go to Q7.

#### Did you hear this from any of the following groups?

- 2. Federal government for example, Homeland Security.
  - 1. Yes
  - 2. No
    - -8 Don't know/not sure
    - -9 Refused

**QbyQ:** Do <u>not</u> read responses

Skip Pattern: None

- 3. State/local government for example Emergency Management, the Health Department, State or local Police or Fire, or other City Leaders like the Mayor
  - 1. Yes
  - 2. No
    - -8 Don't know/not sure
    - -9 Refused

**QbyQ:** Do <u>not</u> read responses

Skip Pattern: None

- 4. Family/Friends
  - 1. Yes
  - 2. No
    - -8 Don't know/not sure
    - -9 Refuse

**QbyQ:** Do <u>not</u> read responses

Skip Pattern: None

- 5. Did you hear this from any other group?
  - 1. Yes
  - 2 No
    - -8 Don't know/not sure
    - -9 Refuse

**QbyQ:** Emphasize the word *emergency kit*. Do <u>not</u> read responses

Skip Pattern: If Q5 = 2, -8, -9 go to Q7.

#### 6. What group or groups would that be?

**QbyQ**: Record verbatim the response.

-9 Refused

Skip Pattern: None.

#### 7. Have you prepared an emergency kit for your home?

- 1. Yes
- 2. No
- 3. Partially
  - -8 Don't know/not sure
  - -9 Refused

**QbyQ**: Read the response category. Emphasize the word *emergency kit*. If the respondent asks what goes in an emergency kit, say, *"Things like a flashlight, batteries, battery-operated radio, food and water."* 

Skip Pattern: If Q7 = 2, -8, -9 go to Q9

#### 8. What items are in the emergency kit?

QbyQ: Record the response. Skip Pattern: Go to Q12

#### 9. Do you intend to put together an emergency kit for your house?

- 1. Yes
- 2. No
  - -8 Don't know/not sure
  - -9 Refused

**QbyQ:** If the respondent asks what goes in an emergency kit, say, "Things like a flashlight, batteries, battery-operated radio, food and water." Do not read responses.

Skip Pattern: If Q9 = 1, go to Q12

#### 10. Why don't you intend to make an emergency kit?

- 1. No time
- 2. Not important
- 3. Don't know what goes in it
- 4. Too expensive
- 5. Too hard to maintain
- 6. Or is there another reason
  - -8 Don't know/not sure
  - -9 Refused

**QbyQ:** Emphasize the word *emergency kit*. If the respondent asks what goes in an emergency kit, say, *"Things like a flashlight, batteries, battery-operated radio, food and water."* Read responses. Record verbatim the response for number 6.

Skip Pattern: If Q10 = 1,2,3,4,5,-8,-9 go to 12.

11. What would be the other reason for why you don't intend to make an emergency kit?

1.		
_	-8 Don't know/not sure	
	-9 Refused	

**QbyQ**: Record the response.

Skip Pattern: None.

- 12. Have you heard or been told to prepare an <u>emergency plan</u> containing information on how to stay in touch with your family in an emergency and where to meet your family if you are separated in an emergency?
  - 1. Yes
  - 2. No.
    - -8 Don't know/not sure
    - -9 Refused

**QbyQ:** Emphasize the word *emergency plan*. If the respondent asks what goes in an emergency plan, say, "A plan containing information on how to stay in touch with your family in an emergency and where to meet your family if you are separated." Do <u>not</u> read responses. **Skip Pattern:** If Q12 = 2, -8, -9 go to Q18.

Did you hear about preparing an emergency plan from any of the following groups?

- 13. Federal government for example, Homeland Security.
  - 1. Yes
  - 2. No
    - -8 Don't know/not sure
    - -9 Refused

**QbyQ:** Do <u>not</u> read responses

Skip Pattern: None

- 14. State/local government for example Emergency Management, the Health Department, State or local Police or Fire, or other City Leaders like the Mayor
  - 1. Yes
  - 2. No
    - -8 Don't know/not sure
    - -9 Refused

**QbyQ:** Do <u>not</u> read responses

Skip Pattern: None

- 15. Family/Friends
  - 1. Yes
  - 2. No
    - -8 Don't know/not sure
    - -9 Refuse

QbvQ: Do not read responses

Skip Pattern: None

- 16. Did you hear this from any other group?
  - 1. Yes
  - 2. No.
    - -8 Don't know/not sure
    - -9 Refuse

**QbyQ:** Do <u>not read responses</u>

Skip Pattern: If Q16 = 2, -8, -9 go to Q18

- 17. What group or groups would that be?
  - -8 Don't know/not sure
  - -9 Refused

**QbyQ**: Record the response.

Skip Pattern: None.

- 18. Has your family developed an emergency plan?
  - 1. Yes
  - 2. No
  - 3. I don't have a family to make a plan with
    - -8 Don't know/not sure
    - -9 Refused

**QbyQ:** Read responses. "A plan containing information on how to stay in touch with your family in an emergency and where to meet your family if you are separated."

Skip Pattern: If Q18 = 1 or 3 go to Q22

#### 19. Do you intend to develop an emergency plan?

- 1. Yes
- 2. No
- 3. I don't know; I haven't thought about it
  - -8 Don't know/not sure
  - -9 Refused

**QbyQ:** Read responses. "A plan containing information on how to stay in touch with your family in an emergency and where to meet your family if you are separated."

Skip Pattern: If Q19 = 1 go to Q22

#### 20. Why don't you intend to develop an emergency plan?

- 1. No time
- 2. Not important
- 3. Don't know what needs to go into a plan
- 4. I live alone
- 5. Or is there another reason
  - -8 Don't know/not sure
  - -9 Refused

**QbyQ:** Read responses. "A plan containing information on how to stay in touch with your family in an emergency and where to meet your family if you are separated." Record verbatim the response for number 5.

Skip Pattern: If Q20 = 1,2,3, 4, -8,-9 go to Q22

#### 21. What would be the other reason for not developing another plan?

**QbyQ**: Record the response.

Skip Pattern: None

# 22. How much would you say you know about biological, chemical, or radiological emergencies?

- 1. A lot
- 2. Some
- 3. A little
- 4. Nothing at all
- 5. Don't understand the question
  - -8 Don't know/not sure
  - -9 Refused

**QbyQ:** Read responses. **Skip Pattern**: None

# 23. How much do you know about what Rhode Island is doing to respond to a biological, chemical, or radiological terrorist attack?

- 1. A lot
- 2. Some
- 3. A little
- 4. Nothing at all
  - -8 Don't know/not sure
    - -9 Refused

**QbyQ:** Read responses. **Skip Pattern**: None

#### 24. What age group are you in?

- 1. 21-34
- 2. 35-49
- 3. 50-64
- 4. Over 64
  - -8 Don't know/not sure
  - -9 Refused

**QbyQ:** Read responses categories.

Skip Pattern: None

#### 25. What is your sex?

- 1. Male
- 2. Female
  - -8 Don't know/not sue
  - -9 Refused

#### 26. Are you Hispanic or Latino?

- 1. Yes
- 2. No
  - -8 Don't know / Not sure
  - -9 Refused

QbyQ: Do not read responses

Skip Pattern: None

#### 27. Which one of these groups would you say best represents your race?

- 1. White
- 2. Black or African American
- 3. Asian
- 4. Native Hawaiian or Other Pacific Islander

6. Other [specify] -8 Don't know / Not sure -9 Refused **QbyQ:** Read responses categories. Skip Pattern: If Q27 = 1,2,3,4,5, -8,-9 go to Q29. 28. What group would you say best represents your race?. -8 Don't know/not sure -9 Refused 29. How many people live in your household including yourself? 1-2 1. 3. 3-4 4. 5-6 5. Over 6 -8 Don't know / Not sure -9 Refused **QbyQ:** Read responses categories. Skip Pattern: None 30. How many individuals in your household are under the age of 18 years old? 1. -8 Don't know / Not sure -9 Refused 31. How many years of school have you completed? -8 Don't know / Not sure -9 Refused **QbyQ:** Read responses categories. **Skip Pattern: Survey Ends** 

5. American Indian or Alaska Native

# Appendix B

# 24. Do you remember receiving a booklet in the mail entitled "Make a Kit. Make a Plan. Stay Informed. Public Health Emergencies: What you can do to prepare."?

- 1. Yes
- 2. No
  - -8 Don't know/not sure
  - -9 Refused

**QbyQ:** If the respondent has trouble remembering the book, you can say, "It was small, blue booklet that was delivered to your house in mid-September

Skip Pattern: If Q24=2, -8, -9 go to Q36

#### 25. Did you read the booklet?

- 1. Yes
- 2. No
- 3. Partially
  - -8 Don't know/not sure
  - -9 Refused

**QbyQ:** Read all responses

Skip Pattern: If Q25=2, -8, -9 go to Q30

#### 26. Did you take any action as a result of the booklet?

- 1. Yes
- 2. No
  - -8 Don't know/not sure
  - -9 Refused

Skip Pattern: If Q26=2, -8, -9, go to Q34

#### 27. What did you do?

1. \_\_\_\_\_

-8 Don't know/not sure -9 Refused

**QbyQ:** Record the response.

**Q by Q:** If the respondent is having trouble with a response, you can probe him suggesting the following options (please read all options):

- Made an emergency kit for my home
- Made an emergency plan for my family
- Sought out more information

#### 28. How did the booklet make you feel?

- 1. Reassured/Comforted
- 2. Scared

- 3. Motivated to take action
- 4. Other
  - -8 Don't know/not sure
  - -9 Refused

QbyQ: Read all responses.

Skip Pattern: If Q28=1, 2, 3, -8, -9, go to Q36

#### 29. What other way did the booklet make you feel?

- - -8 Don't know/not sure
  - -9 Refused

**QbyQ:** Record the response. Skip Pattern: Go to Q36

#### 30. Why haven't you read the booklet yet?

-8 Don't know/not sure -9 Refused

**QbyQ:** Record the response.

#### 31. Do you intend to read the booklet?

- 1. Yes
- 2. No
  - -8 Don't know/not sure
  - -9 Refused

Skip Pattern: If Q31=1, go to Q36

#### 32. Why don't you intend to read the booklet?

- 1. No time
- 2. Subject not important
- 3. Booklet is lost
- 4. Booklet has been thrown out
- 5. Other
  - -8 Don't know/not sure
  - -9 Refused

**QbyQ:** Read all responses.

Skip Pattern: If Q32=1, 2, 3, 4, -8, -9, go to Q36

#### 33. What is that other reason for not intending to read the booklet?

-8 Don't know/Not sure

-9 Refused

**QbyQ:** Record the response. Skip Pattern: Go to Q36

- 34. Why don't you intend to take action as a result of reading the booklet?
  - 1. No need
  - 2. No time
  - 3. Already have a kit and a plan
  - 4. Other
    - -8 Don't Know/not sure
    - -9 Refused

**QbyQ:** Read all responses.

Skip Pattern: If Q34=1, 2, 3, -8, -9, go to Q36

- 35. What is that other reason for not intending to take action?
  - -8 Don' know./not sure
  - -9 Refused

**QbyQ:** Record the response.